

REPORT OF APPLICATIONS OF TWO ROOT STIMULATING PRODUCTS, AND SUNCROPS TO REVIEW THE EFFECTIVENESS ON GROWTH OF SUGARBEET PLANTS cv. CHOPIN

1. - TARGET:

Determine the effect on plant growth on sugar beet. When apply, stimulanting products and suncrops.

2. - MATERIALS AND METHODS:

The trial was conducted at the experimental station of INIA Quilamapu in Chillán, VIII Region, which had as duration between the months of March and October of 2012. The research was conducted in sugar beet plants cv. Chopin, which were obtained from direct seeding in 5 liter plastic pots containing a substrate of sand and peat. The planting date was March 5, 2012, sowing three seeds per pot, and then, when the plants were with 10 true leaves were thinned to leave only one plant per pot, the fastest growing. The experimental design was completely randomized design, the experimental unit was the pot, using eight pots per treatment.

During the dosages, applications and final evaluation of the trial, was attended by leaders and representatives of the test corresponding to INIA and NUTRIPROVE SA.

3.- TREATMENTS

	Product	Dose (gr o cc/ 1Lt water).	Application time
T0	Control	-	
T1	Root Stimulating	5 gr/lit of water.	<ul style="list-style-type: none"> • Plants with 4 true leaves (30-03-2012). • Plants with 6 true leaves (20-04-2012).
T2	Root Stimulating EXTRA	3 cc/ lit of water	<ul style="list-style-type: none"> • Plants with 4 true leaves (30-03-2012). • Plants with 6 true leaves (20-04-2012).
T3	Suncrops	30 gr/ lit of water	<ul style="list-style-type: none"> • Plants with 4 true leaves (30-03-2012). • Plants with 6 true leaves (20-04-2012).

NOTE: The products were applied to foliage with hand sprayer, using a 30 cc per each 8 plants (treatment), equivalent to 500 liters of water per hectare.

Also applied to all treatments potassium nitrate in doses of 8 grams per pot when the plants were 6 true leaves. Fertilization recommended by Technical Manager Felipe Sánchez ; IANSA trials.

4- MEASUREMENTS

1. - Fresh weight of whole plant (leaves, root).

evaluate the 8 plants or replicates.

2. - Dry weight of whole plant (leaf, root).

Evaluate the 8 plants or replicates.

5.-RESULTS

We evaluated the measured plant growth in fresh and dry weight, fresh weight of the whole plant (roots and leaves) was held on October 10.

The results was; the treatment 3 presents the greatest average fresh weight per plant with a value of 25.36 grams, by contrast, the smallest average fresh weight per plant was T2 with 16.83 grams.

6.-CONCLUSION

The treatment produced the highest plant growth on sugar beet cv. Chopin fresh weight was measured in T3 Suncrops treatment, corresponding to a weight of 25.36 grams.

7.-ANNEX PHOTO



Figure 1. Three plants per pot.



Figure 2. Plants treated with Suncrops



Figure 3. Potassium nitrate application



Figure 4. Eight pots per treatment.



Figure 5. Plant with 10 true leaves.
at the time of thinning.



Figure 6. Harvest plants and
fresh weight measurement.